

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Period: \_\_\_\_\_

### PRACTICE TEST

1.) Give an example of each.

Statistical Question

Non Statistical Question

2.) The community council wants to survey the students to find out what theme they want for the upcoming dance. Answer the following questions in as much detail as possible.

Population

Sample

3.) What question should the community council ask on a survey to find the best results? Explain your reasoning.

---

---

---

---

---

4.) How should we pick the students? Explain how your sample is random and unbiased.

---

---

---

---

---

---

---

5.) Which of the three scenarios would be considered a biased sample? WHY?

A. A random sample of students at a middle school shows that 10 students prefer listening to rock, 15 students prefer listening to hip-hop, and 25 students prefer listening to no music while they exercise. It is concluded that half the students prefer no music while exercising.

B. Every tenth person who walks into a department store is surveyed to determine his or her music preference. Out of 150 customers, 70 stated they prefer rock music. The manager concludes that about half the customers prefer rock music.

C. The customers of a music store are surveyed to determine their favorite leisure time activity. The results show that 85% of people like to listen to music in their leisure time.

Explain:

6.) Draw a double stem-and-leaf plot for the data.

Unit 7 Test scores: 28, 45, 41, 40, 45, 50, 33, 27, 35, 33, 46

Unit 8 Test scores: 45, 43, 39, 40, 50, 36, 44, 42, 21, 51, 49

7.) If the unit 7 test needed to have an average of 40, what does the next test need to have a score of?

8.) Which measure of central tendency best describes the data? Explain.

9.) Complete the chart below for the data you used to complete a double box and whisker chartt.

Unit 7 order from least to greatest: \_\_\_\_\_

Unit 8 order from least to greatest: \_\_\_\_\_

	Unit 7	Unit 8
Minimum		
Lower Quartile		
Median		
Upper Quartile		
Maximum		

10.) Box-and-Whisker Plot

11.) Create three questions to ask someone to analyze your box and whisker plot. They can be open-ended, multiple choice, or fill-in the blank.

a)

b)

c)

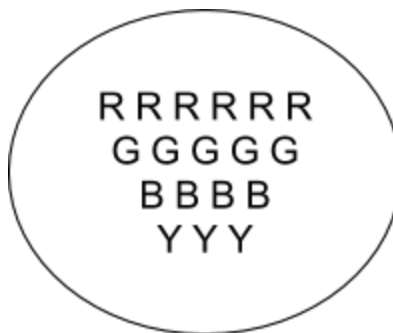
12.) Are the two events dependent or independent? Explain.

Roll a red and a blue number cube.

Randomly select a green sock and then another green sock from a drawer when you are getting ready of school.

13.) Find the following probabilities

- a.) From a standard deck of 52 cards, what is the probability of drawing a heart and then without replacing the card, drawing a spade?
- b.) If you have two number cubes what is the probability of rolling a 5 on the first cube and then a number greater than 2 on the second?



- c.) Use the marble bag from above, assume that you are drawing and not replacing.

What is the probability of drawing a red and then a yellow?

What is the probability of drawing a green and a green?

What is the probability of drawing a yellow and then not a red?